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| 10/562,352 | 05/15/2006 | Peter Noest | 01012-1034 | 6264 |
| 30671 7590 11/14/2007 DITTHAVONG MORI & STEINER, P.C. 918 Prince St. | | | EXAMINER | |
| | | | VUONG, QUOCHIEN B | |
| Alexandria, VA 22314 | | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) |
|--|---|--|
| | 10/562,352 | NOEST ET AL. |
| Office Action Summary | Examiner | Art Unit |
| | Quochien B. Vuong | 2618 |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |
| Status | | |
| Responsive to communication(s) filed on <u>07 Secondary</u> This action is FINAL . 2b)⊠ This 3)□ Since this application is in condition for allowar closed in accordance with the practice under Expression 1. | action is non-final. nce except for formal matters, pro | |
| Disposition of Claims | | |
| 4) ☐ Claim(s) 1-4 and 7 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-4 and 7 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or | vn from consideration. | |
| Application Papers | | |
| 9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the original transfer and the correction of the correction of the original transfer and the correction of the corr | epted or b) objected to by the Idrawing(s) be held in abeyance. See ion is required if the drawing(s) is object. | e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d). |
| Priority under 35 U.S.C. § 119 | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of | s have been received. s have been received in Applicati ity documents have been receive (PCT Rule 17.2(a)). | on No ed in this National Stage |
| | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ate |

DETAILED ACTION

This action is in response to applicant's response filed on 09/07/2007. Claims 1-4 and 7 are now pending in the present application. This action is made non-final.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 1-4 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-4 recites the limitation "the output-power setting mechanism of the signal source" in claim 1, lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

Claim 7, recites among other limitations "...the mechanical changeover switches are configured for switching to a first switching position wherein the electronic attenuator is connected between the signal source and the output, and a second switching position wherein a direct bypass line is connected between the signal source and the output, so that if a predetermined permitted level is exceeded at the output, the mechanical changeover switch at the output-end disconnects the electronic attenuator from the output, and the mechanical changeover switch at the input-end connects the electronic attenuator to the signal source" which is not clear whether the bold Italic

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part above is a new switching position or just the further explanation of the first and second switching positions (when both switches are at positions I or II). It is noted that when the mechanical changeover switch at the output-end disconnects the electronic attenuator from the output, and the mechanical changeover switch at the input-end connects the electronic attenuator to the signal source the circuit is open.

The claim is assumed as best understood by the examiner which has only two switching positions I and II. The following rejection is applied.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. (US 5,862,461) in view of Hashimoto (US 5,793,863).

Regarding claim 1, Yoshizawa et al. disclose an attenuator system for adjusting the output power of an HF signal source, the attenuator system comprising: an electronic attenuator (Fig. 7, #77; Col. 10, lines 46-48), a changeover switch at an inputend of the electronic attenuator (Fig. 7, #72); a changeover switch at an output-end of the electronic attenuator (Fig. 7, #73), and a switchgear for the changeover switches

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(Fig. 7, #76) is coupled to the output-power setting mechanism of the signal source (Col. 11, lines 41-43) wherein, above a predetermined output power (Col. 11, lines 44-45), the bypass lines is connected between the signal source and output (Col. 11, lines 57-59), and below the predetermined output power, the electronic attenuator is connected between the signal source and output (Col. 11, lines 60-63). Yoshizawa et al. do not specifically disclose the changeover switches are mechanical switches. However, Hashimoto disclose in figure 1, the switches 162 and 163 for selecting between two signal paths can be either mechanical or electrical switches ((column 3, lines 22-28). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Hashimoto for using mechanical switches to the attenuator system of Yoshizawa et al. as a system design choice serving the same function for switching the signal path.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Hashimoto and further in view of Loehner et al. (US 5,347,239).

Yoshizawa et al. and Hashimoto teach the attenuator system of claim 1 as stated above. Yoshizawa further teaches the direct bypass line is formed as a mechanical attenuator (Col. 10, lines 44-49). Yoshizawa et al. fails to teach that the mechanical attenuator is switched of via mechanical switches between a plurality of attenuation values. However, Barrett teaches an attenuation network (Fig. 8) that switches between different attenuation values. Barrett teaches that the single-pole double throw switches

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are mechanical switches (Col. 2, lines 48-49). It would have been obvious to one of ordinary skill in the art to use the step attenuator of Barrett with the system of Yoshizawa et al. because it would allow the system to vary the gain with less power consumption.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Hashimoto and further in view of Gattz (US 3,369,096).

Yoshizawa et al. and Hashimoto teach the attenuator system of claim 1 as stated above. Yoshizawa et al. and Hashimoto fail to teach the mechanical changeover switches are bi-stable coaxial relay changeover switches. However, Gattz teaches a coaxial changeover switch (Col. 1, line 11, 16-17). It would have been obvious to one of ordinary skill in the art to use a coaxial changeover switch as the mechanical changeover switch because the coaxial changeover switch of Gattz will have minimal wear of the mechanical parts, which allows the system to last longer.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al. in view of Hashimoto and further in view of.Tomita et al. (US 6,339,353).

Yoshizawa et al. and Hashimoto teach the attenuator system of claim 1 as stated above. Yoshizawa et al. and Hashimoto failsto teach that the mechanical changeover switches are transfer switches. However, Tomita et al. teaches a changeover switch that is comprised of transfer switches (Fig. 13, #94; Col. 12, lines 17-19). It would have

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been obvious to one of ordinary skill in the art to use transfer switches in place of the changeover switches because it would allow for a higher, power signal source.

Response to Arguments

7. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Quochien B. Vuong Nov. 05, 2007. QUOCHIEN B. VUONG PRIMARY EXAMINER